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IN THE

Supreme Court of the United States.

OCTOBER TERM, 1934

Nos.

ALTOONA PUBLIX THEATRES INC.,
Petitioner,

AND

WILMER & VINCENT CORPORATION and LOCUST STREET REAL ESTATE COMPANY,
Petitioners,

VS.

AMERICAN TRI-ERGON CORPORATION and TRI-ERGON HOLDING, A. G.,
Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT.

TO THE HONORABLE THE CHIEF JUSTICE AND THE ASSOCIATE JUSTICES OF THE SUPREME COURT OF THE UNITED STATES:

Your petitioners, Altoona Publix Theatres, Inc., Wilmer & Vincent Corporation, and Locust Street Real Estate Company, respectfully pray for a writ of certiorari to

the Circuit Court of Appeals for the Third Circuit to review a judgment of that Court, entered on June 13, 1934 (Vol. II, p. 1156).

I. Summary and Short Statement of the Matter Involved.

These are two suits for infringement of the same patent. Both suits were defended by R. C. A. Photophone, Inc., a talking motion picture subsidiary of the Radio Corporation of America. The actual defendants are theatre owning and operating companies, who operate two theatres in the Middle District of Pennsylvania, in which the alleged infringing machines, supplied by R. C. A. Photophone, Inc., are used to reproduce sound in conjunction with motion pictures.

The respondent, American Tri-Ergon Corporation, is a patent-holding company, which the record shows (Ex. 14B) was organized in 1928 as a personal venture of William Fox (then but not now connected with the Fox Film Company) for the express purpose of exploiting commercially in the United States the inventions of three Germans, Vogt, Engl and Massolle, who are the patentees of the patent in suit; but the record contains no evidence that the American Tri-Ergon Corporation has ever taken any part in the motion picture industry, either by the production of motion pictures, the furnishing of equipment therefor, or the grant of licenses, its principal activity being the prosecution of this and other litigation. The other respondent, Tri-Ergon Holding, A. G., is a Swiss company which is joined because it claims certain rights under the patent in suit.

In a closely related case, No. 254, *Paramount Publix Corporation, petitioner,* v. *American Tri-Ergon Corporation, respondent,* a petition for a writ of certiorari to the Circuit Court of Appeals for the Second Circuit is being filed at the same time as this petition.

These cases are of major importance to the motion picture industry of this country and to the public, and petitioners have, upon request, consented to the filing of briefs as *amicus curiæ* on behalf of substantially the entire motion picture industry. As construed by the courts below, the patents are so broad as to permit the respondents to claim tribute from practically every one who has produced or exhibited talking motion pictures, or has manufactured equipment for recording or reproducing sound with motion pictures, or has done the developing and printing of sound and picture records. The reproducing apparatus is used in homes, schools and churches, and by the Army, the Navy and other governmental agencies, as well as by motion picture producers and motion picture theatre owners throughout the United States.

Although a different patent is involved in each case, the two cases raise several of the same important questions of law. Both patents are owned by the same respondent, American Tri-Ergon Corporation; both are based upon applications of the same three German citizens, Engl, Vogt and Massolle, who did their alleged inventive work abroad; both relate to alleged inventions used in the art of talking motion pictures; both rest upon subject matter completely anticipated by the prior art; both were copending in the Patent Office for a good many years during which the commercial art of talking motion pictures developed; both were expanded during their long prosecution to cover that commercial art; both were granted after having been persistently and consistently rejected by the Patent Office for a number of years for want of invention; and in both cases disclaimers were filed during the litigation (in the present case only eleven days before trial) which in effect re-wrote the claims in a manner not authorized by the statutes.

Furthermore, the respondents' principal contention in one case was wholly inconsistent with that in the other case. In this case the respondents contended, and

the Court of Appeals held, that the alleged invention covered by the patent here in suit was the advance in the art necessary to the success of talking motion pictures. In the Second Circuit case precisely the same contention was made and upheld for the different alleged invention of the patent there involved. The records show that neither assertion was true. The commercial success of talking motion pictures was due to the developments in the electrical art made in this country, principally by the research engineers associated with the American Telephone and Telegraph Co. and the General Electric Co., and their respective affiliated companies, without which the high quality sound recording and reproduction essential to success could not be attained. The alleged invention of the patent in suit had nothing whatsoever to do with the success of talking pictures.

The Alleged Invention.

The patent here involved is No. 1,713,726 (Vol. III, p. 1), entitled "Device for **Phonographs** with Linear Phonogram Carriers". It was applied for in March, 1922, but was not taken out until May 21, 1929, *more than seven years later.* Claims 5, 7, 9, 13, 17, 18 and 19 were in suit and were all sustained (Vol. III, pp. 8-10). Claim 5, printed in the footnote below, will serve to illustrate the claims*

---

* 5. In phonographic apparatus in which the sound record is formed on an elongated ribbon of inconsiderable mass, having feeding perforations therein, the combination of means for supporting and progressing the record ribbon from one point to another point and past an intermediate point at which the record is made on the ribbon in recording or from which the record is taken from the ribbon in reproducing, including a toothed cylinder over a portion of which the ribbon passes adjacent to said intermediate point, the teeth of said cylinder engaging the perforations of the ribbon, a **flywheel** associated with said cylinder, and means for rotating said cylinder, under control of said flywheel at uniform speed.

The patent is commonly referred to by the respondents themselves, as well as by others, as the **"flywheel patent"** (Vol. V, p. 1633). This is because the gist of the alleged invention is the use of a flywheel in a film phonograph. The main question in this case is whether the public has rightly been deprived of the right to use a flywheel in a film phonograph machine to give uniformity of speed to the film. The patentees claim that no one can use this old and familiar tool in connection with such a machine, although for precisely the same purpose of giving uniformity of motion as it has always been used, and this claim was upheld by the courts below. We believe that the courts below erred in allowing to the respondent a seventeen year monopoly of flywheels when used in film phonographs.

The patentees' original specification, including the original claims, *as filed in the United States Patent Office on March 20, 1922,* is printed in Appendix A. We quote below from that specification the introductory paragraph and the statement of the alleged invention (Vol. III, pp. 15, 16):

> "The recording and the reproduction of sound waves by the use of linear phonogram carriers such as film strips, steel wires, and so forth, can only then be effected in absolutely satisfactory manner, even after the removal of all other occurring difficulties, when the speed of the tone carrier is uniform both for the receiving and the reproduction, and when in both cases no variations of any kind occur. Especially in the case of musical reproductions is the record extremely sensitive to the slightest variations of speed. Consequently, it has hitherto been usual to provide apparatuses such as phonographs and gramophones with speed regulators. In these apparatuses, however, the problem of the uniform motion does not assume the same importance as in the case of phonographs with linear phonogram carriers, because with the former the tone carrier consists of a roller or disc possessing a somewhat considerable mass momentum which equalizes any small irregularities in the motion, such as may be caused, for instance, by the driving

mechanism. In the latter case, however, that of phonographs with linear records, the operation of the record which is in action at a given moment possesses practically no momentum to be taken into consideration. Irregularities in the motion, such, for instance, as may be caused by the projections, the teeth, the belts, the connecting places, and so forth, or by the friction at the guiding point (the slot, the magnet, the condenser), become consequently very much more important with these and thus impair the periodicity of the sound recorded by considerable amounts.

"**According to the present invention**, this drawback which attaches to all hitherto known propulsion mechanisms for linear phonogram records is obviated by the arrangement, that the light tone record has given to it at the controlling point the property of a weighty mass. This is attained by the arrangement that the support (a film strip or the like) is firmly pressed against one or more rollers connecting with **a heavy rotating mass [flywheel]** so that the record moves in exact conformity with the rollers and the rotating mass."

Simply, the patentees stated when they filed their application that uniform motion is desirable, that it had been attained in disc and cylinder phonographs provided "with speed regulators", and that they proposed to attain it in linear record phonographs, the records of which have "practically no momentum" or inertia, by means of a speed regulator or flywheel. It should also be noted that the patentees admit in their specification that machines for recording and reproducing sound from film and similar linear or ribbon type records were old.

The patentees used a flywheel in a film phonograph for the same purpose flywheels have always been used, namely, to provide uniform motion. The Patent Office rules require a description of the entire apparatus containing the alleged invention, and so the patentees described other parts of the machine in addition to the flywheel, including such things as a coupling spring, a sprocket or cylinder over which the film passes, an optical system, and a light sensitive device for translating the light variations

passing through the film into electrical currents. But none of these things, all of which were old and well known (*infra,* p. 13), constituted the alleged invention of the patentees' application. The gist of that was—use a flywheel. These other parts of the machine were brought into the claims during the long prosecution of the application in the Patent Office and by the disclaimer filed only eleven days before the trial, but in every instance it was the flywheel, or means for obtaining uniform motion, which was relied upon to "carry" the claim.

This fundamental fact was completely ignored by the courts below, which sustained the patent on the theory that there was patentable invention in proposing a new combination of old elements.

The use of a flywheel in *"hitherto known propulsion mechanisms for linear phonogram records",* quoting the patentees themselves, was the alleged invention upon which the application was based. If that was anticipated, then clearly the patent could have no validity. That it was completely anticipated cannot be doubted because it was fully disclosed in several prior patents, including the Pedersen (Br.) patent No. 115,942 (Vol. V, p. 1378) in which *the sound is photographically recorded on a film.* This Pedersen patent states (Vol. V, p. 1347, ll. 29-32):

> "The sound is exceedingly sensitive to variation in rotating speed as will be noticed in any gramophone, and it is necessary to obviate this specially during the producing and the reproducing operations by providing **particularly large flywheels** for example."

Flywheels and all the principles of their operation have long been known. As stated in one of *respondents'* own exhibits (Vol. III, p. 421):

> "A flywheel is the *classical* and unexcelled means of obtaining *uniform rotation.*"

The flywheel has been the everyday tool of the mechanic for a great many years. The patentees desired

uniform motion for their ribbon phonograph records so they used a flywheel, just as Pedersen did and everyone else desiring uniform motion has done since the early beginnings of the mechanical arts. All the principles relating to uniform motion and its attainment by the use of a rotating heavy mass or flywheel were not only thoroughly understood many years ago but their application had become merely a routine matter in machine design. All that the patentees did was to use these old principles in their machine.

As long ago as 1896 in *American Road Machine Co.* v. *Pennock and Sharp Co.*, 164 U. S. 26, this Court held the Taft patent, for the combination of a flywheel in a road machine, invalid for want of invention. This Court said (pp. 33, 34):

> "And it is with reference to the momentum feature, treated as an element in all the claims, that the case must be disposed of. * * *
>
> "The knowledge was common that when a continuous power is applied, but the resistance to be overcome is unequal, a fly or balance-wheel will store some of the power expended during the operation and not needed at one stage, and give it out at another."

And, (p. 39):

> "The law of nature was familiarly understood that any moving body tends to continue in motion with a force proportionate to its speed and weight; and it was well known that the function of flywheels and balance-wheels was, in the language of Mr. Brevoort, 'to absorb energy when the machine is moving at greater speed with the least resistance, and to give it out again when the parts meet with greater resistance.'"

We are unable to understand, how, in the face of this decision alone, the courts below could sustain the patent in suit.

There are an almost unlimited number of prior analogous uses of flywheels for giving constant speed in different

types of machines. Flywheels were used for the very same purpose in cylinder and disc record phonographs from the very beginning of the phonograph art just as they were used by Pedersen in his film phonograph. If there could have been any possible justification for the grant of a patent monopoly for the use of a flywheel in any type of phonograph certainly Edison was entitled to it in 1879 when he applied for his patent No. 227,679 (Vol. IV, p. 739). In Fig. 1 of that patent, Edison's large flywheel is clearly shown. As a matter of fact Edison obtained such an improved and satisfactory result by the use of a flywheel that he tried to patent it. Edison stated in his 1879 application (Pat. p. 1, ll. 45-57; Vol. IV, p. 743).

> "In order to insure great uniformity of speed and prevent irregularity in the movement * * * I make use of *an abnormally heavy flywheel, H,* upon the shaft of the phonograph, so as to prevent any trembling movement and to resist any tendency to increase or lessen the speed, for upon uniformity of speed of the phonet with the phonograph depends the accuracy of reproduction, especially in musical sounds, that depend for their tone upon the number of vibrations per second."

And, he made the following claim:

> "The combination with the phonograph cylinder and its shaft, of *a flywheel,* substantially as and for the purposes set forth."

But this claim was never allowed. Edison was denied in 1879 a patent for the use of a flywheel in the phonograph. The utter absurdity of it is that the patentees of the patent in suit did obtain a patent for precisely the same thing in 1929, fifty years later. Edison's claim, quoted above, was rejected by the Patent Office Examiner in the first action, dated April 7, 1879, the Examiner holding (D. Ex. 73, p. 15):

> "The 1st claim of this application covers *a mere double use of a flywheel* as ordinarily used with

machinery for the purpose of securing uniformity of motion. The 1st claim is rejected for lack of invention."

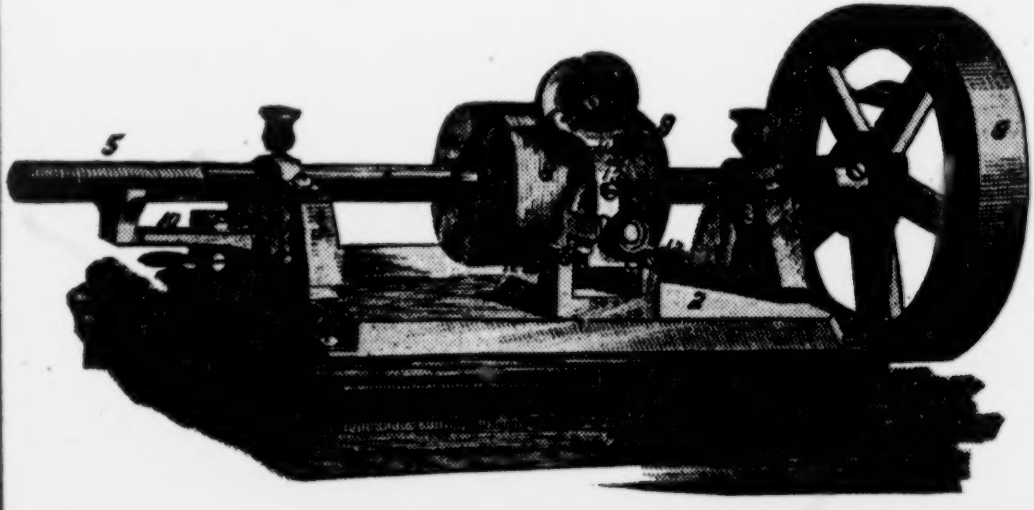
And upon reconsideration, the claim was again rejected as follows (D. Ex. 73, p. 17):

"It must still be held that *the mere application of a flywheel to a phonograph* involved but the exercise of ordinary good judgment and did not require invention. The 1st claim must be accordingly a second time rejected."

Edison then cancelled his claim, thereby conceding, as long ago as 1879 when the phonograph art was still in its infancy, that it was not invention to use a flywheel in a phonograph.

This original Edison phonograph is illustrated and described in the booklet entitled "Instructions For the Management and Operation of Edison Speaking Phonograph", dated 1878, the original of which is in the Smithsonian Institution (Vol. V p. 1621). The phonograph with its heavy flywheel is shown at 6 in the figure on page 3, reproduced below, where it is described as follows:

"6. Heavy flywheel, to give uniform motion. (Very important)"



So, as early as 187[illegible] Edison fully understood the principles of uniform motion and applied them by means of a flywheel to the phonograph.

In view of this Court's decision in the American Road Machine Case, clearly the courts below should have held the patent in suit invalid for lack of invention over Edison alone. Moreover, as shown, the patent could have no validity in view of Pedersen's disclosure which completely anticipated the alleged invention of the application as filed.

The Decisions Below.

The cases come from the Middle District of Pennsylvania, where Judge Johnson held the patent valid and infringed as to all the claims in suit (Vol. II, p. 1027). The decrees were affirmed by the Court of Appeals for the Third Circuit in an opinion by Judge Buffington (Vol. II, p. 1157).

We have printed these opinions in a separate pamphlet to be submitted herewith, in which we have also included certain findings of fact which the District Court entered in our favor, and to which the Court of Appeals referred approvingly (Vol. II, p. 1158). We earnestly request the Court to read these findings, which are only eight in number. If the Court has difficulty in understanding how such findings could be made, and a decision reached sustaining the patent, we can only say that we have exactly the same difficulty. *The findings are wholly inconsistent with the decisions below. If these findings are correct, the patent is hopelessly invalid under the decisions of this Court.*

Judge Buffington's only response to the argument that the patent is necessarily invalid, in view of these findings, which we stressed in the Court of Appeals, was the following (Vol. II, pp. 1163, 1164):

> "Defendants allege that the findings of fact made by the court are inconsistent, that those made in their favor are inconsistent with those made in favor of the plaintiffs.

> "These findings were presented to the court and requested by the parties respectively. Those specially referred to by defendants relate to the well known function of flywheels generally and are not inconsistent with the findings in favor of plaintiffs when considered in connection with the combination of the patent."

So, disregarding the gist of the alleged invention of the application as filed, the Court of Appeals held that a seventeen year patent monopoly could be based on the idea of using old and well known elements, including a flywheel, in an old type of phonograph. If there could be no patentable combination of a flywheel with the phonograph cylinder and its shaft of Edison's phonograph in 1879, or of a flywheel with the parts of Taft's road-scraping machine in 1896, we think it clear that there could be no patentable combination of a flywheel with the parts of merely another type of phonograph in 1922. And most certainly there could be none in view of the disclosure of the prior Pedersen patent (*supra*, p. 7). *We think it enough to condemn the decisions of both courts below that neither court even so much as mentioned the Pedersen patent.*

As the patentees admitted in their application (*supra*, p. 6), ribbon or film phonographs were old just as were cylindrical phonographs in the case of Edison, and road machines in the case of Taft. (See any of the following prior patents: Ries No. 1,607,480, Vol. V, p. 1232; Pedersen (Br) No. 115,942 of 1918, Vol. V, p. 1346; Dragoumis (Fr) No. 472,467 of 1914, Vol. V, p. 1379; and Bell & Tainter No. 341,214 of 1886, Vol. IV, p. 763). Moreover, in the film or ribbon phonographs shown in the last three of these prior patents, flywheels were employed to impart uniform motion to the ribbon records. *And Pedersen, as previously pointed out, specified (Vol. V, p. 1347, lines 29-32) that "particularly large flywheels", should be used to prevent speed variations in his film phonograph in which, exactly as in the claims in suit, the sound is photographically recorded on a motion picture film.*

The Court of Appeals based its holding of validity on the ground that the invention was a combination consisting of five elements and that the prior art did not show all five of these elements *combined* in one single structure. These elements are (1) a flywheel, (2) a spring coupling therefor to minimize speed variations not taken care of by a flywheel alone, (3) an optical system for directing the light onto the film, (4) a light-sensitive device or photoelectric cell, and (5) arcuate bending of the film, *i. e.*, wrapping it around a roller so that it will lie flat while passing through the machine. *Each of these elements was old and well known.*

The District Court correctly found as facts that spring-flywheel drives and also optical systems, used for the same purpose, were old (Vol. II, pp. 1114-1115). Photoelectric cells were also old (Kunz No. 1,381,474, Vol. V. p. 1162; Langmuir, No. 1,273,627, Vol. IV. p. 1128), and were actually used by the General Electric Company in reproducing sound from film prior to the earliest date the patentees can claim (Vol. I, 605-608). Moreover, the Nullity Department of the German Patent Office (its highest appellate body) decided several years ago in one of the present patentees' own cases that there was no invention in the use of the photoelectric cell for reproducing sound (D. Exs. 113A, 113B). And the film has been wrapped around a roller in every motion picture machine ever used, so far as we are aware, and is wrapped around a roller in numerous film and ribbon phonographs, including those disclosed in the Ries, Dragoumis, and Bell and Tainter patents previously mentioned (Vol. V, pp. 1232, 1379, Vol. IV, p. 763).

As we have shown, the application for the patent in suit, as filed in the Patent Office, did not indicate that any such combination of elements, as that upon which the opinion of the Court of Appeals is based, constituted the invention, or even that *any* of the elements referred to in the opinion of the Court of Appeals were essential except the flywheel.

Moreover, no one of the claims in suit calls for this combination of five elements. Claim 5 specifies only the flywheel. Four other claims, (claims 9, 17, 18 and 19) taken with the disclaimer, include only one of the elements (arcuate bending) in addition to the flywheel. This combination was shown in the prior Dragoumis (Fr) patent No. 472,467 of 1914, Vol. V, p. 1379, and the Bell & Tainter patent No. 341,214 of 1886, Vol. IV, p. 763; and was also clearly disclosed in the specification of the Pedersen (Br) patent No. 115,942 of 1918, Vol. V, p. 1346. Furthermore, in view of this Court's decision in the *American Road Machine Case* (*supra*, p. 8), it could not possibly be invention to add Pedersen's flywheel to the film phonograph shown in the Ries patent No. 1,607,480, Vol. V, p. 1232, in which the film passes around a sprocket both above and below the point of translation. Of the two remaining claims, claim 7 specifies merely the spring-flywheel drive, which both courts below found to be old (Vol. II, pp. 1115, 1161). The other claim, claim 13, includes the photoelectric cell and optical system but omits the arcuate bending, the flywheel being brought into this claim only by the disclaimer. The prior Ries patent No. 1,607,480 (Vol. V, p. 1232) and the Rankine publication (Vol. V, p. 1402) each show the combination of an optical system and light-sensitive device for reproducing sound from film and, as previously pointed out, the application of a flywheel to either of these disclosures certainly would not constitute invention in view of this Court's decision in the *American Road Machine Case.*

We respectfully submit that patentable invention was wholly lacking in the claimed subject-matter of the patent in suit.

II. Reasons Relied upon for the Granting of a Writ of Certiorari.

The discretionary power of this Court is invoked upon the following grounds:

(1) Because the decision of the court below is in conflict with the decisions of this Court in *American Road Machine Co.* v. *Pennock and Sharp Co.*, 164 U. S. 26, and *DeForest Radio Co.* v. *General Electric Co.*, 283 U. S. 664, as to what is and is not patentable invention warranting a seventeen year monopoly. The gist of the alleged invention was the use of a flywheel in an old and well known film phonograph. This was not invention because the principles of uniform motion were thoroughly understood many years ago, their application through the use of flywheels had become merely a routine matter in machine design, and flywheels had been used in phonographs to give uniform motion.

(2) Because the decision of the court below is in conflict with the decisions of this Court in *Grinnell Washing Machine Co.* v. *Johnson Co.*, 247 U. S. 426, *Concrete Appliances Co. et al.* v. *Gomery et al.*, 269 U. S. 177, and *Powers-Kennedy Contracting Corp. et al.* v. *Concrete Mixing and Conveying Co.*, 282 U. S. 175, the combinations of apparatus claimed being no more than an application of mechanical skill to known elements in the course of a natural development of the art.

(3) Because the decision of the court below is in conflict with the decisions of this Court in *Railway Co.* v. *Sayles*, 97 U. S. 554, *Pattee Plow Co.* v. *Kingman*, 129 U. S. 294, and other cases, the court below having sustained claims 9, 13, 17, 18 and 19, which are for an alleged invention different from that of the application as filed, the application having been unlawfully expanded during its

long pendency in the Patent Office to cover the commercial art developed in the meantime.

(4) Because the decision of the court below is in conflict with the decisions of this Court in *Holland Furniture Co.* v. *Perkins Glue Co.*, 277 U. S. 245, *Westinghouse* v. *Boyden*, 170 U. S. 537, *Risdon Locomotive Works* v. *Medart*, 158 U. S. 68, and other cases, the court below having sustained claims 9, 18 and 19, which describe merely the function of a machine and not a patentable process.

(5) Because the decision of the court below is in conflict with the very recent decision of the Court of Appeals for the Sixth Circuit in *Fruehauf Trailer Co.* v. *Highway Trailer Co.*, 67 F. (2nd) 558. The court below gave validity to the disclaimer, filed only eleven days before the trial, over four years after the patent issued, and over eleven years after the patent was applied for, by which the claims in suit were amended and rewritten, a purpose which the disclaimer statute was not intended to permit. Not only is it important to the public that this conflict be settled but it is of paramount importance that this Court end the great abuse of the disclaimer statute so prevalent in recent years, and so well illustrated by the disclaimers involved in this case, the related case in the Second Circuit, and the conflicting case in the Sixth Circuit. (See the petition and brief in the Second Circuit case, pp. 12, 30.)

(6) Because the case involves an important question of patent law arising under the amendment of March 3, 1903 (32 Stat. L. 1225) to R. S. 4887 (35 U. S. C. 32), which should be settled by this Court. The question—also raised in the related case in the Second Circuit—is, what is the correct rule of law to be applied under the statute, as amended, to determine whether a prior foreign patent to the same patentees, filed more than twelve months before the United States patent, is or is not *for the same invention* as the United States patent.

Wherefore, your petitioners respectfully pray that a writ of certiorari be issued under the seal of this Court, directed to the United States Circuit Court of Appeals for the Third Circuit, commanding the said Court to certify and send to this Court, on a day to be designated, a full and complete transcript of the record and all proceedings of the Circuit Court of Appeals had in this cause, to the end that this cause may be reviewed and determined by this Court, that the judgment of the Circuit Court of Appeals be reversed, and that petitioner be granted such other and further relief as may seem proper.

CHARLES NEAVE,
HENRY R. ASHTON,
Counsel for Petitioner.

July, 1934.

BRIEF FOR PETITIONER IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI.

The Opinions of the Courts Below.

The opinion of the District Court is reported in 5 F. Supp. 32 (Vol. II, p. 1027). The opinion of the Court of Appeals is unreported (Vol. II, p. 1157).

Jurisdiction.

The date of the judgment is June 13, 1934 (Vol. III, p. 1156). The statute under which jurisdiction is invoked is Section 240 (a) of the Judicial Code (28 U. S. C. 347, as amended). Cases believed to sustain the jurisdiction are *DeForest Radio Co.* v. *General Electric Co.*, 283 U. S. 664; *Carbice Corporation of Am.* v. *American Patents Development Co. et al.*, 283 U. S. 27; and *Simmons* v. *Grier*, 258 U. S. 82.

Statement.

The facts, so far as this application is concerned, are sufficiently stated in the petition.

Specification of Errors.

The errors which petitioners will urge, if the writ of certiorari is granted, are that the Circuit Court of Appeals for the Third Circuit erred:

1. In holding patent No. 1,713,726 valid and infringed.

2. In failing to hold that patent No. 1,713,726 is invalid because of anticipation and also want of invention.

3. In adopting a lower standard of invention than that laid down in the decisions of this Court.

4. In failing to hold that the disclaimer is an invalid disclaimer, and that the claims in suit, all of which are affected by the disclaimer, are thereby shown to be invalid.

5. In failing to hold patent No. 1,713,726 invalid and unenforceable because unlawfully expanded in the Patent Office and because of intervening public and private rights.

6. In failing to hold that claims 9, 13, 17, 18 and 19 of patent No. 1,713,726 are invalid because for an alleged invention different from that of the application as filed.

7. In failing to hold that claims 9, 18 and 19 are invalid because they describe merely the function of a machine and not a patentable process.

8. In failing to hold patent No. 1,713,726 invalid under Revised Statutes Section 4887 (35 U. S. C. 32), because of the prior grant of German patent No. 387,058 to the same patentees for the same alleged invention upon an application filed more than twelve months before the application for the patent in suit was filed.

9. In failing to hold patent No. 1,713,726 invalid because not based upon a joint invention of all three patentees.

Summary of Argument.

The points of the argument follow the reasons relied upon for the allowance of the writ, and, for the sake of brevity, are not repeated at this point.

Argument.

The remainder of this brief is devoted to a discussion of the "special and important" reasons relied upon, which should cause this Court to grant the writ and to review the case on the merits.

I. The decision of the court below is in direct conflict with the decisions of this Court in *American Road Machine Co.* v. *Pennock and Sharp Co.*, 164 U. S. 26, and *DeForest Radio Co.* v. *General Electric Co.*, 283 U. S. 664, as to what is and is not patentable invention warranting a seventeen year monopoly. The gist of the alleged invention was the use of a flywheel in a film phonograph. This was not invention because the principles of uniform motion were thoroughly understood many years ago, their application through the use of flywheels had become merely a routine matter in machine design, and flywheels had been used in phonographs to give uniform motion.

We have shown in the petition the conflict which exists between the decision of the court below and the decision of this Court in *American Road Machine Co.* v. *Pennock and Sharp Co.*, 164 U. S. 26. The facts of that case are so much like the facts of the present case that the conflict is at once apparent. If it did not involve invention to add a flywheel to an old road-scraping machine in 1896, certainly it did not involve invention to add one to an old ribbon or film phonograph in 1922, the flywheels in both instances merely performing their known functions, namely, to give uniform motion or speed to some moving element or elements. *The public has the right to use any old tool, such as a flywheel, and cannot be deprived of that right by patents claiming it for merely another use. Other-*

wise, flywheels could be patented indefinitely for each machine that goes into use.

The court below stated in its opinion (Vol. II, p. 1161):

> "The well known function of a flywheel is to give uniformity of motion by absorbing energy when speed is increased and by releasing it when speed is decreased, but this knowledge was not enough to solve the problem of preventing sound distortion in recording sound on film and in reproducing the same for which uniformity of motion is absolutely necessary. The patentees utilized this knowledge of the function of a flywheel which they made an element of their new combination in order to secure the necessary uniform motion of the flimsy film as it passed over the sound head."

This use of a flywheel by the patentees for exactly the same purpose flywheels have always been used and, as we have shown in the petition, such use being the only inventive idea the patentees represented in their original application to have discovered, the patent in suit is clearly invalid.

Even if the alleged invention were not anticipated, as it is by such prior patents as Pedersen (Br) No. 115,942 (Vol. V, p. 1346), Dragoumis (Fr) No. 472,467 (Vol. V, p. 1379) and Bell & Tainter No. 341,214 (Vol. IV, p. 763), *supra,* page 12, it is invalid under the rule of law stated by this Court in the *High Vacuum Tube Case,* cited in the heading. If, as this Court held in that case, the useful application in the Langmuir high vacuum tube of the relationship of the degree of vacuum to ionization did not constitute patentable invention because that relationship was known, then clearly the common knowledge of flywheels and flywheel principles precludes invention in the obvious application made of them in the patent in suit.

The court below departed widely from the standard of invention which has been set by this Court to protect the public from unwarranted monopoly. As was said by

Justice Holmes in the last patent opinion he wrote (*Smith* v. *Springdale Amusement Park, Ltd. et al.*, 283 U. S. 121, 123), "There was an utter absence of invention justifying the issue of this patent."

II. The decision of the court below is in conflict with the decisions of this Court in *Grinnell Washing Machine Co.* v. *Johnson Co.*, 247 U. S. 426; *Concrete Appliances Co. et al.* v. *Gomery et al.*, 269 U. S. 177, and *Powers-Kennedy Contracting Corp. et al.* v. *Concrete Mixing and Conveying Co.*, 282 U. S. 175, the combinations of apparatus claimed being no more than an application of mechanical skill to known elements in the course of a natural development of the art.

If there was no patentable invention in the combination of the flywheel with a film phonograph, the gist of the alleged invention, there could be no patentable combination in the use of any of the other old elements worked into the claims during the long Patent Office prosecution. This fact is clearly shown by the patentee's failure to state in their original specification that these other old elements were important features of their alleged invention. The alleged patentable combination of these old elements was merely the creation of a very industrious patent solicitor, whose tireless efforts over a period of five or six years ultimately resulted in the surrender of the Patent Office Examiner who earlier had resisted all attack.

The decision below is unquestionably at variance with the decisions of this Court relating to combination patents. In the *Grinnell Case*, 247 U. S. 426, the Phillips patent for the driving mechanism of a washing machine and wringer was held invalid. After reviewing the earlier decisions, this Court said (pp. 433, 434):

> "Applying the rule thus authoritatively settled by this court, we think no invention is shown in assem-

> bling these old elements for the purposes declared. *No new function is 'evolved from this combination;' the new result, so far as one is achieved, is only that which arises from the well-known operation of each one of the elements.*
>
> "In the gearing specified every element is old. The operations of the wringer and the washing machine, although simultaneous, are independent one of the other. The control of the operation of the wringer is by an old and well-known method. *From the co-operation of the elements, here brought together, no new result, involving the exercise of the creative faculty which is invention, is achieved.*"

Applying this test to the elements of the claims in suit, it cannot fairly be denied that the flywheel merely performs the known function of a flywheel; the spring, the known function of a spring; the optical slit, the known function of an optical slit; the photoelectric cell, the known function of a photoelectric cell; and the wrapping of a film around a roller the known function of such operation. **The only result achieved is that which "arises from the well-known operation of each one of the elements", and "no new function is 'evolved from this combination' ".**

As this Court also said in *Concrete Appliances Co.* v. *Gomery,* 269 U. S. 177, 184, 185:

> "Failure to make use of these obviously applicable methods and appliances in combination, suitable to the particular work in hand, in dealing with a new plastic material capable of similar treatment, would, we think, have evidenced a want of ordinary mechanical skill and of familiarity with construction problems and methods."

And, in *Powers-Kennedy Contracting Corporation, et al.* v. *Concrete Mixing and Conveying Co.,* 282 U. S. 175, 186:

> "For these reasons we find that the patent is invalid. It consists of a combination of elements all of which were old in the art. Its application to the transporta-

> tion of concrete did not involve invention. Neither the combination of old elements or devices accomplishing no more than an aggregate of old results (*Hailes* v. *Van Wormer,* 20 Wall. 353; *Office Specialty Mfg. Co.* v. *Fenton Metallic Mfg. Co.,* 174 U. S. 492; *Grinnell Washing Machine Co.* v. *E. E. Johnston Co.,* 247 U. S. 426) nor the use of an old apparatus or appliance for a new purpose (*Roberts* v. *Ryer,* 91 U. S. 150), is invention.

Also, as this Court said during the last term in *Electric Cable Joint Co.* v. *Brooklyn Edison,* 54 S. Ct. 586, 589, the addition made by the patentee—

> "must be the result of invention, not the mere exercise of the skill of the calling and *not one plainly indicated by the prior art.*"

The decision of the court below is in conflict with the applicable decisions of this Court on combination patents and should be overruled.

III. The decision below is in conflict with the very recent decision of the Court of Appeals for the Sixth Circuit in *Fruehauf Trailer Co.* v. *Highway Trailer Co.,* 67 F. (2nd) 558. The court below gave validity to the disclaimer, filed only eleven days before the trial, over four years after the patent issued, and over eleven years after the patent was applied for, by which the claims in suit were amended and rewritten, a purpose which the disclaimer statute was not intended to permit.

The Patent Office, which alone has the right to grant a patent monopoly, has never considered any of the claims in suit. The court below, and not the Patent Office, has given to the respondents a patent monopoly. This is because after the patent had issued, the patent

owner filed a disclaimer materially changing the nature of the granted claims. This disclaimer is Appendix B hereof. It will be observed that it was the American Tri-Ergon Corporation, by its president William Fox, which, in 1933, substantially changed the character of the alleged invention for which the three inventors had applied and been granted a patent, and that these inventors had nothing to do with this.

The prosecution of the application for the patent in suit is an extreme example of that type of prosecution which this Court has justly condemned in *Webster Electric Co.* v. *Splitdorf Electrical Co.* 264 U. S. 463, 465; *De-Forest Radio Co.* v. *General Electric Co.* 283 U. S. 664, 675; *Railway Co.* v. *Sayles,* 97 U. S. 554, 563; and other cases. And the disclaimer is of the type so severely criticized generally that legislation has been proposed to prevent a patentee from disclaiming anything but an entire claim.

Not one of the claims in suit is an original claim. The following chronology shows when each claim was inserted by amendment in the patentees' application, originally filed in March, 1922:

Claim 5	inserted	March 25, 1925
Claim 7	"	March 25, 1925
Claim 9	"	May 3, 1928
Claim 13	"	Dec. 6, 1928
Claim 17	"	March 6, 1929
Claim 18	"	March 6, 1929
Claim 19	"	April 10, 1929

Moreover, five of the claims in suit were not inserted in the application until after their subject-matter had gone into public use in the talking picture art. And, even the other two claims, which were inserted in the application as late as March 25, 1925, respondents found it necessary to amend at the last minute by the disclaimer. This long period during which the patentees were amending and ex-

panding their application witnessed many of the chief developments of the talking picture art (*De Forest Radio Co.* vs. *General Electric Co.*, 283 U. S. 664, 675).

The disclaimer was not filed until respondents had been permitted to make detail drawings of the alleged infringing machines, and had been served with the amended answers containing all the prior art to be relied upon. Taking the fullest advantage of the knowledge thus acquired, respondents prepared and filed their disclaimer only eleven days before the trial. Thus the patentees took over eleven years to put their claims in final form and did it then only as the trial was about to begin. **Certainly, there is no justification whatsoever for the delay in filing the disclaimer until more than four years after the patent issued.**

Every one of the claims in suit was amended by the disclaimer. The application as filed related broadly to a ribbon phonograph, whether the ribbon be formed of steel wire, wax-coated paper, or film. It was not confined to a photographic record. Claims 5, 7, and 17, as issued, specified broadly such a ribbon record, and no apparatus for translating the sound to or from the ribbon record was specified in these claims. Each of these claims was unlawfully amended by the disclaimer by adding as an entirely new element "apparatus whereby the sound is translated by light to or from the film". The obvious purpose of these amendments was to try to avoid those prior art patents, such as Bell and Tainter No. 341,214 (Vol. IV, p. 763) and Dragoumis French Patent No. 472,467 (Vol. V, p. 1379), in which the ribbon record is recorded and reproduced by means of a stylus instead of by light.

The patent in suit was applied for and obtained on the representation that the patentees had made an invention by using a flywheel on a phonograph in which a *ribbon* record of any description might be used and irrespective of whether the sound was reproduced by light, by a stylus or by any other device. *The patentees could not, by*

means of a disclaimer, retract from this position and by so doing escape the prior art which discloses ribbon phonographs employing flywheels.

The disclaimer as to claim 17 is a particularly flagrant example, and as to which respondents' counsel admitted at the trial *"that it brings in a definite limitation, which can't be fairly said that it should have been read in there, in light of the specification."* As stated above, claim 17 was amended by adding apparatus using light for translating sound to or from a film. In addition respondents further amended the claim so as to change it into a claim for something entirely different from what it was originally. They inserted the two additional elements: 1. "a sprocket engaging the film forms a part of the film progressing means", and 2. "a substantial portion of the periphery of the cylinder is in contact with the film in its travel from the intermediate point to said sprocket".

Before these amendments claim 17 was one of the most comprehensive claims in the patent and was fully anticipated. It was relied upon originally as to both types of petitioner's apparatus. As rewritten by the disclaimer it can be read, if at all, only on the Type PS16 apparatus. This mis-named "disclaimer" is a most obnoxious example of claim rewriting by disclaimer, over four years after the patent issued, for the express purpose of making the claim cover the respondents' apparatus and avoid the prior art. As rewritten the claim is for an alleged invention which the patentees never thought they had invented, and it brings in details of respondents' machine which are entirely different from anything ever contemplated by the patentees.

The disclaimers as to the remaining claims are also invalid. As issued by the Patent Office, claims 9, 13, 18 and 19 did not specify a flywheel, but only its function of giving uniform speed. Therefore, each of them was anticipated by any of the prior art devices in which the

record was moved at uniform speed by any means whatsoever. So again to avoid a number of clear anticipations not before the Patent Office, respondents introduced one or more entirely new elements in the claims, and the Patent Office was thereby prevented from passing on the new claims. *The proper procedure for respondents was to apply for a reissue so that the Patent Office could consider the claims.*

Nothing could be more inequitable than the resulting situation, if respondents are permitted to consummate their unlawful purpose. They deliberately rewrote their claims, more than eleven years after their application was filed and more than four years after the patent issued, to avoid the prior art and to cover the existing commercial practice. They did this with complete knowledge of the practical art, including petitioners' machine, and of petitioners' case, including the prior art upon which petitioners had relied as invalidating the patent. Petitioners' type PS1 machine was placed on the market as early as October, 1928, which was considerably before the patent issued. And the type PS16 was introduced in December, 1929. **Both machines were kept on the market in the belief that the patent as issued was clearly invalid. And the Photophone business, involving large investments made in good faith, was based on these machines. Their continued use certainly should not be enjoined by a court of equity at the behest of respondents, who, in view of their disclaimer, certainly have not done equity or even come into court with clean hands.**

The misuse of the disclaimer statute was brought to this Court's attention in 1924 in *Thropp's Sons Co.* v. *Seiberling,* 264 U. S. 320, in which a writ of certiorari to the Circuit Court of Appeals for the Third Circuit was granted. Unfortunately, however, this Court found it unnecessary to pass upon the matter. The Court said, in the opinion by former Chief Justice Taft, (pp. 330, 331):

> "The disclaimers are attacked on the ground that they exceed the legal function of a disclaimer and are an

> attempt to change a mechanical patent to a process or method patent, *something which could only be properly accomplished by a reissue.* • • • We do not find it necessary to pass upon the validity of the method of making disclaimers here pursued, because we agree with the Sixth Circuit Court in failing to find invention in the State device either as a mechanical or as a method patent."

Applications for reissue are subject to examination and rejection by the Patent Office, and the circumstances under which they may be granted are prescribed in detail by statute; whereas disclaimers are filed *ex parte* and are not subject to such examination. This Court has frequently held reissued patents invalid because for an invention different from the original; and in *Pattee Plow Company* v. *Kingman,* 129 U. S. 294, this Court stated (p. 299):

> "• • • it is well settled that a reissue can only be granted for the same invention intended to be embraced by the original patent, and the specification cannot be substantially changed, either by the addition of new matter or the omission of important particulars, so as to enlarge the invention as intended to be originally claimed."

Where, as in the present case, the effect of rewriting the claims by disclaimer is not only to avoid prior art which would otherwise anticipate them, but also to bring into the claims devices which had gone into commercial use prior to such rewriting, and furthermore to expand the claims to cover an invention different from the original, it is submitted that the principles laid down by this Court governing reissues should be applied.

In the petition for a writ of certiorari in *Thropp's Sons Co.* v. *Seiberling, supra,* it was stated:

> "It is of the utmost importance to all persons or concerns interested or connected with patent matters that

> it should be decided by this Court whether or not a disclaimer, filed *ex parte* and not subject to examination by the Patent Office Officials, can be used so as to change a machine patent into a method patent. *If this point is not now decided by this Court, there will undoubtedly be numerous attempts along this same line which will result in a great amount of litigation and indecision as to a fundamentally important provision of the patent Statutes.*"

This prophesy has been fully realized. The misuse of the disclaimer statute has become notorious. The disclaimers involved in this case, the related case in the Second Circuit, and the case of *Fruehauf Trailer Co.* v. *Highway Trailer Co.*, 67 F. (2nd) 558 are typical of the practice which had grown up. In the latter case the Court of Appeals for the Sixth Circuit recently held (pp. 559, 560):

> "The enactment of Rev. St. Sec. 4917 (35 USCA Sec. 65), was never intended to permit the revamping and rephrasing of claims to the end that they might cover structures upon which they did not before read, or to the end that, by the addition of a new element in combination, the disclaimer might validate a claim which would otherwise be invalid under the prior art. This is not limiting the combination already claimed; it is in effect claiming a new and a different combination, (citing cases). The function of a disclaimer is well stated in the leading case of Hailes v. Albany Stove Co. 123 U. S. 582, 587. It must cover 'a separate claim in a patent, or some other distinct and separable matter, which can be exscinded without mutilating or changing what is left standing.' *It cannot be used to change the character of the invention, or, in effect, to make for the patentee a new patent. This is fundamental.* • • •
>
> "*Tested by these standards, both disclaimers are invalid.*"

The conflict now existing between these decisions of three of the Circuit Courts of Appeals should be resolved, and this important question of patent law finally settled by this Court.

IV. The decision below is in conflict with the decisions of this Court in *Railway Co.* v. *Sayles*, 97 U. S. 554, *Pattee Plow Co.* v. *Kingman*, *129 U. S.* 294, and other cases, the Court below having sustained claims 9, 13, 17, 18 and 19, which are for an alleged invention different from that of the application as filed, the application having been unlawfully expanded during its long pendency in the Patent Office to cover the commercial art developed in the meantime.

As in the related case in the Second Circuit, here also, the patentees overreached by expanding their application to cover alleged inventions different from the original.

The application for the patent in suit as filed did not purport to be for the use of a photoelectric cell, or for an optical system, or for arcuate bending of the film, or for any combination of these, but, as shown, was merely for the use of a flywheel in an old film or ribbon record phonograph to give the record a uniform speed.

When the patentees filed their application and also their corresponding foreign applications they did not claim a photoelectric cell or have the slightest idea that their application had anything to do with a photoelectric cell or with a photoelectric cell as distinguished from any other light-sensitive device. *It was not until December 6, 1928, after the photoelectric cell had been adopted commercially and after RCA Photophone Inc. (defending this suit) had placed on the market its machines employing photoelectric cells, that the patent owner introduced claims, like claim 13 in suit, in which a photoelectric cell as distinguished from a selenium cell is claimed as one of several elements (Vol. III, p. 86).*

At this late date the applicants pointed out *for the first time* that they were claiming as an element "the

photoelectric cell which is capable of responding without inertia and with a high degree of accuracy to the exceedingly complex and rapid sound variations corresponding to speech" (Vol. III, p. 88). The application for the patent in suit did not purport to be an application for the use of the photoelectric cell at all or for any combination in which a photoelectric cell is used. Therefore, claim 13, which includes the photoelectric cell as an element, is for a different invention from that of the original application.

We have shown in our discussion of the invalid disclaimer (*supra*, pp. 27, 28) that three entirely new elements were thereby introduced into claim 17. They render the claim invalid as being for a different invention from the original application. There is absolutely nothing in the application as originally filed that contains the remotest suggestion that the patentees had made an invention in which the film progressing means consisted of a separate sprocket in addition to a cylinder. This change in claim 17 was a bold attempt in claim rewriting by disclaimer to make the claim read on respondents' PS16 apparatus. As rewritten, it is clearly for a different invention from the original application.

The third new element introduced into claim 17 is for wrapping the film around the surface of a roller or cylinder. The same idea was also introduced into claims 18 and 19 for the first time by the disclaimer. As expressed in the third element added to claim 17, it is—

> "a substantial portion of the periphery of the cylinder is in contact with the carrier in its travel from the intermediate point to said sprocket."

And, in claims 18 and 19:

> "the inertia control is effected by passing the film *over* a rotating member and so applying inertia thereto as to eliminate substantially all irregularities in its rotation."

This was already in claim 9 as printed in the patent, being expressed as:

> "flexing the film arcuately longitudinally at the point of translation".

The file history of the patentees' application shows that the very first time that this idea occurred to the patentees was on *May 2, 1928* (Vol. III, p. 78) when they introduced it as new matter into their application by adding claim 9, and stating (Vol. III, p. 80):

> "A new method claim is added herewith broadly covering one phase of applicant's invention which is not suggested in any way by the prior art. It will be appreciated that the mere flexing of the film into an arcuate shape and advancing the same circumferentially, may contribute greatly to the elimination of extraneous vibrations regardless of the form of mechanism used for supporting and advancing the film".

The decision of the court below, sustaining these claims, is in direct conflict with the decisions of this Court in *Railway Co.* v. *Sayles,* 97 U. S. 554, and *Pattee Plow Co.* v. *Kingman,* 129 U. S. 294. In the former case this Court said (p. 563):

> "It will be observed that we have given particular attention to the original application, drawings, and models filed in the Patent Office by Thompson and Bachelder. We have deemed it proper to do this, because, if the amended application and model, filed by Tanner five years later, embodied any material addition to or variance from the original,—any thing new that was not comprised in that,—such addition or variance cannot be sustained on the original application. *The law does not permit such enlargements of an original specification, which would interfere with other inventors who have entered the field in the meantime, any more than it does in the case of reissues of patents previously granted. Courts should regard with jealousy and disfavor any attempt to enlarge the scope of an application once filed, or of*

a patent once granted the effect of which would be to enable the patentee to appropriate other inventions made prior to such alteration, or to appropriate that which has, in the meantime, gone into public use.''

As stated in the above quotation, the same rule maintains in the reissue cases in which this Court has frequently held reissue patents invalid because for an invention different from the original. (See quotation from *Pattee Plow Co.* v. *Kingman,* 129 U. S. 294, 299, *supra,* p. 30).

The alleged invention of the patent in suit was unlawfully expanded both within and without the Patent Office. The decision below tacitly approves such practice and thus squarely conflicts with the decisions of this Court.

V. The decision below is in conflict with the decisions of this Court in *Holland Furniture Co.* v. *Perkins Glue Co.,* 277 U. S. 245; *Westinghouse* v. *Boyden,* 170 U. S. 537; *Risdon Locomotive Works* v. *Medart,* 158 U. S. 68, and other cases, the court below having sustained claims 9, 18 and 19, which describe merely the function of a machine and not a patentable process.

At the end of the opinion the Court below stated (Vol. II, p. 1172) that ''All the other defenses have been considered, but we think that they are not substantial''. The defense stated in the heading above and also that of the preceding section of this brief were not discussed by the court. That they are substantial is sufficiently shown, we think, by the fact that to overrule them the court below had to render a decision squarely conflicting with the

decisions of this Court. The defenses depend on matters of law, not of fact. The facts are not open to dispute.

Claims 9, 18 and 19, which are method or process claims, are invalid because they are directed merely to the functions of an apparatus which is not patentable subject matter. They are merely claims for the functions of the patentees' phonograph shown in the patent drawings. As such, what they claim is neither a "machine" nor an "art" under the statute (R. S. 4886; 35 U. S. C. 31). As has been repeatedly held by this Court, such claims are invalid. The leading cases are cited in the heading. In *Risdon Locomotive Works* v. *Medart,* 158 U. S. 68, this Court stated the rule as follows (p. 77):

> "• • • a valid patent cannot be obtained for a process which involves nothing more than the operation of a piece of mechanism, or, in other words, for the function of a machine."

The decision below, sustaining alleged method claims 9, 18 and 19, clearly conflicts with this Court's decisions, because those claims cover merely the functions of the patentees' phonograph. The decision should be reversed on this ground also.

VI. The case involves an important question of patent law arising under the amendment of March 3, 1903 (32 Stat. L. 1225) to R. S. 4887 (35 U. S. C. 32), which should be settled by this Court. The question—also raised in the related case in the Second Circuit—is, what is the correct rule of law to be applied under the statute, as amended, to determine whether a prior foreign patent to the same patentees, filed more than twelve months before the United States patent, is or is not *for the same invention* as the United States patent.

The pertinent part of the statute, as amended, is quoted below.*

The object of the statute is to synchronize the patent system of this country with those of other countries so that United States patents will not monopolize here inventions which have been freed from monopoly abroad. That object has been completely frustrated by the decision of the court below in this case.

The patent in suit comes squarely within the statutory prohibition because the same patentees were granted on December 27, 1923, German patent No. 387,058 (Vol. V, p. 1543) for the same alleged invention, the German patent being based on an application filed in Germany on May 23,

*"No person otherwise entitled thereto shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid by reason of its having been first patented or caused to be patented by the inventor or his legal representatives or assigns in a foreign country, unless the application for said foreign patent was filed more than twelve months, in cases within the provisions of section forty-eight hundred and eighty-six of the Revised Statutes * * *, prior to the filing of the application in this country in which case no patent shall be granted in this country."

1920, much more than twelve months prior to March 20, 1922, the date of filing here.

The statement of invention in the German patent is almost identical with that of the application for the patent in suit as filed. It is as follows:

"In connection with phonographic reproductions the quality and the faithfulness of the reproduced music and sounds compared to the original depends on the quality of the recording and on the speed at which the phonogram carrier passes the control place (magnet, light line, sound box stylus or needle, etc.). The requirements to be complied with in this connection, namely, that first of all the average recording and reproduction speed must be the same and that secondly the moving of the phonogram carrier past the control place must take place in an absolutely continuous manner, are not complied with by the known phonographs, the phonogram carriers of which consist of bands, wires or the like. No devices have become known which make possible an exact control and regulation of the speed of the phonogram carrier directly at the control place, nor do these phonographs insure an absolute instantaneous moving constancy, for experiments have shown that the sound carrier experiences a frictional resistance at the control place and in most cases passes it not continuously but in a jerky manner. This interfering or disturbance phenomenon occurs especially if the sound carrier is, for instance, in the form of a perforated film, and, running off synchronously with a picture film, is used to produce talking motion pictures. In addition to the above mentioned irregularities due to friction, the intermittent movement of the picture film, the influence of the sprockets, and of the belt joints can bring about such discontinuity at the control place of the sound band that enjoyable rendition becomes impossible.

"The invention eliminates these disadvantages. It assures directly at the control place, both a controllable average and also an instantaneous, absolutely constant propulsion velocity of the phonogram carrier. This is attained by coupling the recording or control place of the sound carrier (which is being moved longitudinally

> **and which is of small mass) with a rotating and much larger mass [flywheel], in such a manner that the number of revolutions of the latter, which is not subject to any rapid fluctuations, determines the longitudinal speed of the sound band."**

And, the first claim of the German patent is as follows:

> **"1. Device for phonographs for the uniform drive of the linear phonogram carrier especially for purposes of the talking film, having the distinctive feature that in order to obtain an always constant and controllable mean longitudinal speed at the control place the phonogram carrier is coupled with a rotating centrifugal mass [flywheel]."**

The record also shows that one of the patentees and also the respondent, American Tri-Ergon Corp., admitted before these suits were brought that the two applications are for the same invention (See Vol. III, p. 301, letter written by respondents' counsel; and Vol. V, p. 1673, published statement of the patentee, Vogt).

The court below discusses this defense, beginning at page 1168 of Volume II. At the outset, it is held that the inventions of the two applications are "similar," but the court nevertheless holds they are different because some details of each of the claims in suit are not specifically claimed in the German patent. These details were not claimed in the German patent because the patentees themselves did not regard them as matters of substance. Respondents' solicitor was responsible for their inclusion, some even by the disclaimer after this defense came to respondents' attention in petitioners' answers. The finding of the Court of Appeals with respect to claim 17 in suit is significant. The court relied entirely upon the arcuate bending of the film, inserted in this claim by the disclaimer, to distinguish the claim from the German patent.

As in the related case in the Second Circuit, the court below based its decision as to this defense on matters of

form rather than of substance. Therefore, its decision, which is in conflict with the interpretation we understand to have been given to the statute by this Court in *Fireball Gas Tank & Illuminating Co.* v. *Commercial Acetylene Co. et al.*, 239 U. S. 156; *Leeds & Catlin* v. *Victor Talking Machine Co.*, 213 U. S. 301; *Commercial Mfg. Co.* v. *Fairbank Canning Co.*, 135 U. S. 176; and *Siemens* v. *Sellers*, 123 U. S. 276, should be overruled. The rule of those decisions is clearly that what is required to constitute identity of a patent within the purview of Section 4887 is substantial, not formal, identity of invention.

Conclusion.

The decision of the Court of Appeals in this case is clearly in conflict with the applicable decisions of this Court which we have cited.

Under the decision below, the respondents will claim tribute from practically all motion picture theatre owners throughout the United States and other users of sound equipment, as well as from the manufacturers of such equipment. The patentees made no contribution to the art which could possibly warrant such a claim.

It is earnestly urged, therefore, that the petition be granted.

Respectfully submitted,

CHARLES NEAVE,
HENRY R. ASHTON,
Counsel for Petitioners.

August, 1934.

APPENDIX A.

Specification and Claims of the Application for the Patent in Suit as Originally Filed in the United States Patent Office on March 20, 1922.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, HANS VOGT, JOSEPH MASSOLLE and JOSEF ENGL, citizens of the German Republic, and residents respectively the first of Berlin-Wilmersdorf, the second and third of Berlin-Grunewald, Germany, have invented a new and improved

DEVICE FOR PHONOGRAPHS WITH LINEAR PHONOGRAM CARRIERS

of which the following is a full, clear and exact description.

The recording and the reproduction of sound waves by the use of linear phonogram carriers such as film strips, steel wires, and so forth, can only then be effected in absolutely satisfactory manner, even after the removal of all other occurring difficulties, when the speed of the tone carrier is uniform both for the receiving and the reproduction, and when in both cases no variations of any kind occur. Especially in the case of musical reproductions is the record extremely sensitive to the slightest variations of speed. Consequently, it has hitherto been usual to provide apparatuses such as phonographs and gramophones with speed regulators. In these apparatuses, however, the problem of the uniform motion does not assume the same importance as in the case of phonographs with linear phonogram carriers, because with the former the tone carrier consists of a roller or disc possessing a somewhat considerable mass momentum which

equalizes any small irregularities in the motion, such as may be caused, for instance, by the driving mechanism. In the latter case, however, that of phonographs with linear records, the operation of the record which is in action at a given moment possesses practically no momentum to be taken into consideration. Irregularities in the motion, such, for instance, as may be caused by the projections, the teeth, the belts, the connecting places, and so forth, or by the friction at the guiding point (the slot, the magnet, the condenser), become consequently very much more important with these and thus impair the periodicity of the sound recorded by considerable amounts.

According to the present invention, this drawback which attaches to all hitherto known propulsion mechanisms for linear phonogram records is obviated by the arrangement, that the light tone record has given to it at the controlling point the property of a weighty mass. This is attained by the arrangement that the support (a film strip or the like) is firmly pressed against one or more rollers connecting with a heavy rotating mass, so that the record moves in exact conformity with the rollers and the rotating mass.

Constructional examples of the invention are illustrated in the Figures.

The phonogram carrier, which in these illustrations is shown as a film strip, moves over the rollers r', r^2, suitably coupled by gearing or belting, of which rollers preferably the roller directly driven by the motor is provided with toothing. One or even both rollers are rigidly connected with the rotating masses m', m^2, which give to the film strip f travelling between them under tension the requisite uniformity of its motion. Between the rollers r', r^2, there is placed preferably in a sleeve h the part e sensitive to electric light, which is influenced by a light ray passing out of o and over the film. The rollers dr', dr^2, press the film against the carrier roller r^2.

Another construction of the invention in which the little irregularities often caused by the teeth or the film strips between r', r^2, easily brought into mechanical oscillations, are avoided. This is shown in Figure 2.

The film f is drawn by the roller r' to the controlling point s and is removed from the controlling point by the roller r^2. Between these transporting rollers, the film is guided over the periphery of a larger roller R on which it rests closely by adhesion, even during the turning motion. As the roller is rigidly connected with the rotating mass m, or can be constructed so as to be itself the rotating mass, the film moves uniformly on in like manner as the surface of the roller R. For the purpose of pressing the film upon the roller R, and for the equalizing of irregularities of motion, there are provided the spring-supported rollers dr', dr^2. The light rays required for the illumination or the transmission of light through the film are thrown upon the film in the form of a narrow line by means of the objective o. On the reproduction the light rays pass through the film strip and fall upon the photo cell z preferably placed in its interior. For this purpose, the roller is either partially transparent, made of glass, or the part of the film bearing the tone indications projects beyond the non-transparent parts of the roller.

In the hereinbefore described form of execution of the invention the driving of the tone band is however not effected directly at the point of projection but in front or behind the same. The driving point of the tone band can however, in further development of the invention, be arranged directly at the point of projection. The driving member can, in this case, be constructed in such a manner that the coming in gear and the getting out of gear of the feeding teeth in the perforations remains without reaction on the speed of the film band at the point of projection.

Fig. 3 shows this form of construction by way of example. The shaft *a* journalled at *b* and *c*, carries at one end the feed-cylinder *d* which has as usual teeth designed to engage with the perforations of the tone-band. The film *g* is in contact with one part of the circumference of this cylinder, the length of this part corresponding with the distance between the pressing pulleys *e* and *f*. The driving disk *h'* for which a toothed wheel or any other convenient means can be substituted, and further the flywheel *i*, are keyed upon this shaft and designed to communicate to the shaft and consequently to the cylindler *d*, a uniform revolving speed. The tone band will consequently move also with uniform speed, for instance in the direction *f-e*. These pulleys *e-f* press the band strongly against the cylinder *d* so that it is securely guided upon the entire length from *f* to *e* owing to the feeding teeth engaging with the perforations. The throwing in gear and out of gear of the feeding teeth is effected by the pressure of the pulleys *f* and *e* so that vibrations of the film band at the point of projection do not longer occur. The free ends *g-g* of the film band are preferably guided by the rollers for preliminary winding up in the manner well known from cinematography so that they form a loop. For recording purposes, if the ryth-mically controlled light which has to be recorded needs expose the tone band only upon the coated surface, a solid cylinder *d* can be used, upon which the film band bears with its entire width.

For reproducing purposes, when the light, collected by the object glass *n* to a narrow line coming from the source of light-projection traverses the film in order to get a light-sensitive element, for instance the cell *k* with the cathode *l* and anode *m*, a specially constructed cylinder is required, *d* on figure 3 shows a form of construction by way of example in which the part of the band which carries the tone-signs projects over the

edge of the cylinder. The tone-signs can be utilised also between the two rows of perforations, as only one row of perforations is used for conveying, the other side of the tone band moving along either without a special guiding or with the aid of a wheel with or without feeding teeth, which is specially driven, or not.

If the driving shaft of the tone-film revolves merely with a low number of revolutions and if a rigid drive is used, the circumferential speed of fly wheels which can be practically still utlised, will, under certain conditions, not be sufficient for compensating the speed fluctuations.

According to the invention the driving of the fly wheel axle is therefore effected with the aid of an elastic coupling, for instance a spring. This spring can be very feeble as, at constant speed, it has to overcome only the losses from friction of the driving part. As however, at the starting and running out of the driving gear, the inertia of the fly wheel has to be overcome, it is advantageous to limit the play of the spring in either direction by a fixed stop.

We claim:—

1.—An arrangement for phonography with linear phonogram carrier characterized in that constant speed is imparted to the phonogram carrier at the point of recording or at the governing point by means of a heavy mass moving with the same, in providing the recording—or governing point (s) of the phonogram carrier (f) between the two cylinders (r' and r^2) (fig. 1) having each a fly wheel (m' or m^2), if a cylinder (R) with fly wheel (m) is used, upon the circumference (fig. 2).

2.—A driving device for tone bands as claimed in claim 1 characterized in that the toothed cylinders which feed the tone band act directly at the projection-point of the tone band.

3.—A driving device as claimed in claim 2 characterized in that, for reproducing purposes, the part of the film bands which carries the tone-records projects over the edge of the toothed cylinder so that the bundle of light-rays can get without impediment to the light-electric element.

4.—Drive for tone films as claimed in claim 1 or 2 characterized by a drive with electric [elastic] coupling.

5.—Form of construction of the drive as claimed in claim 4 characterized by the limiting of the coupling (spring) at either side by fixed stops.

APPENDIX B.

Disclaimer.

(Filed in Patent Office on June 1, 1933.)

To the Hon. Commissioner of Patents:

Your petitioner, American Tri-Ergon Corporation, a corporation organized and existing under the laws of the State of New York and having a place of business in the City, County and State of New York, represents that in the matter of certain inventions for which Letters Patent of the United States, No. 1,713,726, were granted on May 21, 1929, on an application filed by the inventors, Hans Vogt, Joseph Massole and Joseph Engl, said American Tri-Ergon Corporation is the owner of the entire right, title and interest under an assignment dated June 6, 1930 and recorded in the Transfers of Patents of the United States Patent Office July 3, 1930, Liber T-144, pp. 192-199, and other assignments referred to in said assignment, subject only to license rights for certain purposes only as referred to in said assignments, which license rights were granted to Tri-Ergon Musik A. G., a corporation of St.

Gall, Switzerland, and all of which license rights Tri-Ergon Holding, A. G., a corporation of Switzerland, having a place of business at St. Gall, Switzerland, now claims to own; and that your petitioner has reason to believe that through inadvertence, accident or mistake, and without any fraudulent or deceptive intention, the specification and claims of said Letters Patent are too broad, including that of which said inventors were not the first inventors. Your petitioner therefore hereby enters this disclaimer to such parts of the claims which it does not choose to claim or hold by virtue of the patent or said assignments, to-wit:

(a) All combinations and methods set forth in the specification and claims of the patent, except as embodied respectively in apparatus wherein and methods whereby sound is translated by light to or from a film strip moving uniformly past said light.

(b) The method as set forth in claim 9, except wherein the uniformity of movement of the film past the translation point is effected by subjecting the portion of the film passing said point to the control of the inertia of a rotating weighty mass.

(c) The combination as set forth in claim 13, except wherein a flywheel is operatively connected with the film through means which imparts uniformity of motion of the flywheel to the film.

(d) The combination as set forth in claim 17, except wherein a sprocket engaging the carrier forms a part of the carrier progressing means and a substantial portion of the periphery of the cylinder is in contact with the carrier in its travel from the intermediate point to said sprocket.

(e) The method as set forth in claim 18, and said method as incorporated in claim 19, except wherein the

inertia control is effected by passing the film over a rotating member and so applying inertia thereto as to eliminate substantially all irregularities in its rotation.

Signed at New York, in the County of New York and State of New York, this 31st day of May, 1933.

AMERICAN TRI-ERGON CORPORATION,
By W. Fox
(William Fox) President.

Witness:

PAGE S. HASELTON.